



Docket No. 3239.1000-017

STATEMENT UNDER 37 C.F.R. § 3.73(b)

Applicant(s): Raanan A. Miller and Markus Zahn

Application No.: 10/082,803 Filed: February 21, 2002

For: Longitudinal Field Driven Ion Mobility Filter and Detection System

The Charles Stark Draper Laboratory, Inc., a corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is

- A. ☒ the assignee of the entire right, title and interest in the patent application identified above; or
- B. ☐ an assignee together with [ ] of the entire right, title and interest in the patent application identified above. A separate Statement under 37 CFR § 3.73(b) is being submitted.

The right, title and interest of the above-named assignee in the patent application identified above is established by virtue of:

- A. ☒ An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s) of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Signature: Joseph M. Wolfe  
Date: \_\_\_\_\_  
Name: Joseph M. Wolfe  
Title: Vice President and Treasurer  
Date: 30 October 2002  
Signature: \_\_\_\_\_

RECEIVED  
DEC 12 2002  
TECHNOLOGY CENTER 2800

DEC 10 2002

STATEMENT CLAIMING SMALL ENTITY STATUS  
37 CFR 1.27(a)-NONPROFIT ORGANIZATION

DOCKET NUMBER: 3239.1000-017

Applicant or Patentee: Raanan A. Miller and Markus Zahn  
Application or Patent No.: 10/082,803  
Filed or Issued: February 21, 2002  
Title: Longitudinal Field Driven Ion Mobility Filter and Detection System

I hereby state that I am an official empowered to act on behalf of the nonprofit organization identified below:

NAME OF NONPROFIT ORGANIZATION The Charles Stark Draper Laboratory, Inc.  
ADDRESS OF NONPROFIT ORGANIZATION 555 Technology Square  
Cambridge, MA 02139-3563

TYPE OF NONPROFIT ORGANIZATION:

- ☐ UNIVERSITY OR OTHER INSTITUTION OF HIGHER EDUCATION  
☒ TAX EXEMPT UNDER INTERNAL REVENUE SERVICE CODE (26 U.S.C. 501(a) and 501(c)(3))  
☐ NONPROFIT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE OF STATE OF THE UNITED STATES OF AMERICA  
(NAME OF STATE \_\_\_\_\_)  
(CITATION OF STATUTE \_\_\_\_\_)  
☐ WOULD QUALIFY AS TAX EXEMPT UNDER INTERNAL REVENUE SERVICE CODE (26 U.S.C. 501(a) and 501(c)(3)) IF  
LOCATED IN THE UNITED STATES OF AMERICA  
☐ WOULD QUALIFY AS NONPROFIT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE OF STATE OF THE UNITED  
STATES OF AMERICA IF LOCATED IN THE UNITED STATES OF AMERICA  
(NAME OF STATE \_\_\_\_\_)  
(CITATION OF STATUTE \_\_\_\_\_)

I hereby state that the nonprofit organization identified above qualifies as a nonprofit organization as defined in 37 CFR 1.27(a)(3) for purposes of paying reduced fees to the United States Patent and Trademark Office regarding the invention described in:

- ☐ the specification filed herewith with title as listed above.  
☒ the application identified above.  
☐ the patent identified above.

I hereby state that the rights under contract or law have been conveyed to and remain with the nonprofit organization regarding the above identified invention. If the rights held by the nonprofit organization are not exclusive, each individual, concern, or organization having rights in the invention must file separate statements as to their status as small entities. No rights to the invention are held by any person who would not qualify as a person under 37 CFR 1.27(a)(1) or by any concern which would not qualify as a small business concern under 37 CFR 1.27(a)(2) or a nonprofit organization under 37 CFR 1.27(a)(3).

Each person, concern, or organization having any rights in the invention is listed below:

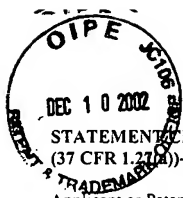
- ☐ no such person, concern, or organization exists.  
☒ each such person, concern, or organization is listed below.

Sionex Corporation  
300 Second Avenue  
Waltham, MA 02451

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.27(g)(2))

NAME OF PERSON SIGNING Joseph M. Wolfe  
TITLE IN ORGANIZATION OF PERSON SIGNING Vice President and Treasurer  
ADDRESS OF PERSON SIGNING 555 Technology Square, Cambridge, MA 02139-3563  
SIGNATURE Joseph M. Wolfe DATE 30 October 2002

RECEIVED  
DEC 12 2002  
TECHNOLOGY CENTER



STATEMENT CLAIMING SMALL ENTITY STATUS  
(37 CFR 1.27(a))--SMALL BUSINESS CONCERN

DOCKET NUMBER: 3239.1000-017

Applicant or Patentee: Raanan A. Miller and Markus Zahn

Application or Patent No.: 10/082,803

Filed or Issued: February 21, 2002

Title: LONGITUDINAL FIELD DRIVEN ION MOBILITY FILTER AND DETECTION SYSTEM

I hereby state that I am

- ☐ the owner of the small business concern identified below:  
☒ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF SMALL BUSINESS CONCERN Sionex Corporation

ADDRESS OF SMALL BUSINESS CONCERN 300 Second Avenue

Waltham, MA 02451

I hereby state that the above identified small business concern qualifies as a small business concern as defined in 13 CFR Part 121 for purposes of paying reduced fees to the United States Patent and Trademark Office. Questions related to size standards for a small business concern may be directed to: Small Business Administration, Size Standards Staff, 409 Third Street, SW, Washington, DC 20416 or you may call 202-205-6618.

I hereby state that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention described in:

- ☐ the specification filed herewith with title as listed above.  
☒ the application identified above.  
☐ the patent identified above.

If the rights held by the above identified small business concern are not exclusive, each person, concern or organization having rights in the invention must file separate statements as to their status as small entities. No rights to the invention are held by any person who would not qualify as a person under 37 CFR 1.27(a)(1), or by any concern which would not qualify as a small business concern under 37 CFR 1.27(a)(2), or a nonprofit organization under 37 CFR 1.27(a)(3).

Each person, concern or organization having any rights in the invention is listed below:

- ☐ no such person, concern, or organization exists.  
☒ each such person, concern, or organization is listed below.

The Charles Stark Draper Laboratory, Inc.  
555 Technology Square  
Cambridge, MA 02139-3563

Separate statements are required from each named person, concern, or organization having rights to the invention stating their status as small entities.

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.27(g)(2))

NAME OF PERSON SIGNING James E. Maslow, Esq.

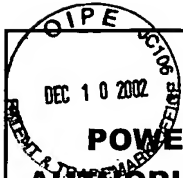
TITLE OF PERSON IF OTHER THAN OWNER Corporate IP Counsel

ADDRESS OF PERSON SIGNING 300 Second Avenue, Waltham, MA 02451

SIGNATURE *James E. Maslow* DATE 10/1/02

@PFDesktop\5:OPMA/MHODMA/iManage;540818;1

RECEIVED  
DEC 12 2002  
TECHNOLOGY CENTER 2800



**POWER OF ATTORNEY OR  
AUTHORIZATION OF AGENT AND  
CORRESPONDENCE ADDRESS**

Application Number	10/082,803
Filing Date	February 21, 2002
First Named Inventor	Raanan A. Miller
Confirmation Number	4435
Group Art Unit	2881
Examiner Name	Not Provided
Attorney Docket Number	3239.1000-017

Title Longitudinal Field Driven Ion Mobility Filter and Detection System

I/We hereby appoint

- ☒ the attorneys/agents associated with **Customer No. 021005**  
☐ Practitioner(s) named below:

as my/our attorneys/agents to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

The correspondence address for the above-identified application is:

- ☒ Customer Number 021005  
 Hamilton, Brook, Smith & Reynolds, P.C.  
 530 Virginia Road  
 P.O. Box 9133  
 Concord, Massachusetts 01742-9133  
☐ Other \_\_\_\_\_

RECEIVED  
DEC 12 2002  
TECHNOLOGY CENTER 2880

Please direct all telephone calls and facsimiles to:

Name David J. Thibodeau, Jr., Esq. Tel. No. 978-341-0036 Fax No. 978-341-0136

I am the:

- ☐ Applicant/Inventor.  
☒ Authorized representative of the Assignee of the entire interest. See 37 C.F.R. 3.71. A Statement under 37 C.F.R. § 3.73(b) is enclosed.  
☐ Authorized representative of an assignee together with ☐ of the entire interest. A separate Statement under 37 C.F.R. § 3.73(b) is enclosed.

**SIGNATURE of Applicant or Assignee of Record**

Name Joseph M. Wolfe, Vice President and Treasurer

Signature Joseph M. Wolfe

Date 30 October 2002

- ☒ Total of ☐ 1 forms are submitted.

**COPY** JointASSIGNMENT

WHEREAS, we, **Raanan A. Miller and Markus Zahn**, have invented a certain improvement in **LONGITUDINAL FIELD DRIVEN ION MOBILITY FILTER AND DETECTION SYSTEM** described in an application for Letters Patent of the United States, the specification of which:

- ☐ is being executed on even date herewith and is about to be filed in the United States Patent Office;
- ☒ was filed on **February 21, 2002** as Application No. **10/082,803**;
- ☐ was patented under U.S. Patent No. ☐ on ☐.

WHEREAS, **The Charles Stark Draper Laboratory, Inc.** (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the [State/ Commonwealth of ], and having a usual place of business at **555 Technology Square, Cambridge, Massachusetts 02139-3563** desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving

of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

---

---

Inventor's Signature: \_\_\_\_\_

**Raanan A. Miller**

State/Commonwealth \_\_\_\_\_

of \_\_\_\_\_

County of \_\_\_\_\_

Then personally appeared before me the above-named **Raanan A. Miller** and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

(SEAL)

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
(print name)

My Commission expires \_\_\_\_/\_\_\_\_/\_\_\_\_

---

---

Inventor's Signature: \_\_\_\_\_

*Markus Zahn*

Markus Zahn

State/Commonwealth \_\_\_\_\_

of Mass

County of Middlesex

Then personally appeared before me the above-named **Markus Zahn** and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 17 day of June, 2007.

(SEAL)

*Joel Laureanc*  
\_\_\_\_\_  
**JOEL LAUREANC**

Notary Public

(print name)

My Commission expires 5/20/08

**JOEL LAUREANC**  
Notary Public

My Commission Expires May 20, 2008

ASSIGNMENT

WHEREAS, we, Raanan A. Miller and Markus Zahn, have invented a certain improvement in **LONGITUDINAL FIELD DRIVEN ION MOBILITY FILTER AND DETECTION SYSTEM** described in an application for Letters Patent of the United States, the specification of which:

- ☐ is being executed on even date herewith and is about to be filed in the United States Patent Office;
- ☒ was filed on **February 21, 2002** as Application No. **10/082,803**;
- ☐ was patented under U.S. Patent No. ☐ on ☐.

WHEREAS, **The Charles Stark Draper Laboratory, Inc.** (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the [State/ Commonwealth of ], and having a usual place of business at **555 Technology Square, Cambridge, Massachusetts 02139-3563** desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving



of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor's Signature: \_\_\_\_\_

Raanan A. Miller

Raanan A. Miller

State/Commonwealth

of

Massachusetts

County of

Middlesex

Then personally appeared before me the above-named **Raanan A. Miller** and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 13<sup>th</sup> day of June, 2002.

(SEAL)

James B. Maslow  
James B. Maslow

Notary Public

(print name)

My Commission expires 03 / 08 / 2007

Inventor's Signature: \_\_\_\_\_

Markus Zahn

State/Commonwealth \_\_\_\_\_

of \_\_\_\_\_

County of \_\_\_\_\_

Then personally appeared before me the above-named **Markus Zahn** and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

(SEAL)

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
(print name)

My Commission expires \_\_\_\_/\_\_\_\_/\_\_\_\_